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## Factsheet

# Unintentional Childhood Poisoning

### Key facts

- On average **366** children aged under 15 years are admitted to hospital (overnight or longer), annually, due to unintentional poisoning.<sup>1</sup>
- While the average hospital stay for a child who has been poisoned is only 1.3 days (less than for many other types of childhood injury), for some children poisonings can have lifelong consequences.
- Of all children hospitalised after a poisoning, most (80%) are aged 0–4. This compares with 9% who are aged 5–9 and 11% aged 10–14.
- Boys make up just over half the children poisoned (53%).
- Nearly three-quarters of all childhood poisonings occur in the child's home, or the home of a friend or family member.
- While poisonings are spread across all ethnic groups, Pasifika and Asian children appear less at risk than other children.
- European children account for 61% of hospitalisations for poisoning, Maori children for 26%, Pasifika children for 6% and all other ethnicities for a further 7%.
- The most common childhood poisoning agents are drugs and medications (both prescription and non-prescription) which account for approximately 67% of hospitalisations.
- Common household chemicals and cleaners account for around 30% of poisoning hospitalisations.
- Poisoning is rarely fatal for children, with one child death each year, on average.<sup>2</sup>

*A poison is any substance that can cause harmful effects to the body when swallowed or inhaled. Poisons are mostly in solid or liquid form but can also be sprays or gas. Some of the most common and dangerous poisons are: medicines and drugs, household products and cleaners, personal care products, plants and environmental poisons.*

### The Picture for 0–4 Year Olds

Poisoning is the second most common cause of injury-related hospital admission for children aged 0–4 years. During the five-year period 2000–2004:

- Of all children aged under 5 years, those aged between 1 and 3 years were most at risk of poisoning (Figure 1),
- Cleaner / chemical poisonings occurred most frequently to 1 and 2 year olds. However poisonings from drugs and medications were spread across the under 5 age group (Figure 1).

**Figure 1: Unintentional Poisoning to 0–4 Year Olds (2000–2004)<sup>1</sup>**

Age	Poisoning Hospitalisations
0	60 (4%)
1	513 (36%)
2	540 (38%)
3	227 (16%)
4	88 (6%)

## Miriama's story

Liquid paracetamol was prescribed for 2 year old Miriama because she had a fever. Miriama's mum gave her a dose just before bed-time, and left the bottle on the dresser so it would be handy if she got up to Miriama in the night. Her mum forgot to check that the lid was on properly. Some time in the night Miriama woke, felt hot and seeing her medicine, opened the bottle and took a long drink to "feel better". Luckily, her mother heard the bottle fall to the floor and realising what had happened rushed her little girl to the Emergency Department. Miriama had to be admitted because she'd drunk so much of the medicine, but luckily, she made a complete recovery and was able to go home again the next day.

## Poisonings to Under Fives —

### A Picture From One Emergency Department

Changes in the treatment of poisonings in the last decade mean fewer children are now hospitalised after a poisoning incident. Children are often treated at Emergency Departments or by local A & E clinics or General Practitioners.

Between April 2004 and March 2005 Christchurch Hospital Emergency Department (ED) staff saw 87 children aged 0–4 years following a poisoning.<sup>3</sup> Of the children seen 60% were treated and discharged, 39% were admitted to a hospital ward, and one child left before treatment was provided. Information from the ED shows that;

- Poisoning accounted for 11% of all injury cases seen.
- Most poisonings (89%) happened to children aged between 1 and 3 1/2 years.
- 60% of children seen were boys.
- Liquid paracetamol was the agent **most** commonly involved, accounting for 21% of poisonings.
- 79% of poisoning incidents occurred in the home; 74% of these were in the child's own home.
- Of the 46 cases where the location of the poisoning was known, 22% happened in the bedroom, 15% in the kitchen, 9% in the living-room, 9% in the garden, 4% in the bathroom and 4% in the garage.

## Profile of a Year of Enquiries (National Poisons Centre)

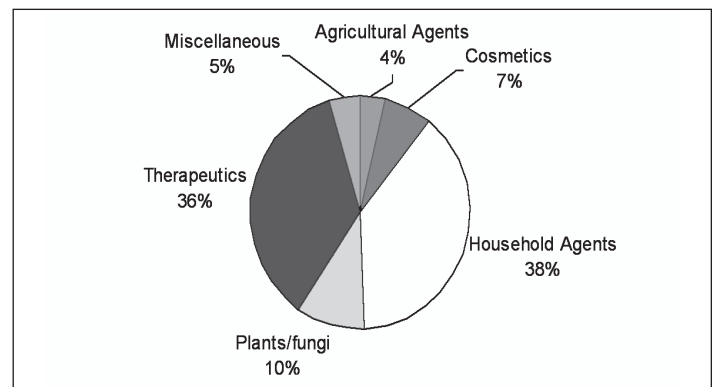
The National Poisons Centre answers enquiries both from health professionals and the general public concerning acute poisoning and the toxic effects of chemicals. This service operates 24 hours a day, 365 days a year with a toll free telephone number **0800 POISON / 0800 764 766**.

Calls to the National Poisons Centre show a different profile to child poisoning from hospitalisations. For the period January 1st 2005 to December 31st 2005:

- About 30,300 enquiries were received.<sup>4</sup>
- Of these, 40% (11,868) were related to children.
- Enquiries about drugs and medications were less frequent than those concerning household agents (Figure 2).
- Poisoning from household agents (38%), therapeutic

- and drug medicines (36%) and plants (10%) made up 84% of all enquiries relating to children (Figure 2).
- Cleaners, detergents and disinfectants accounted for 40% of household agents poisonings to children.
- Analgesics, ointments and creams and anti-inflammatory drugs were the three most common causes of a child being poisoned by a therapeutic agent.
- Other common enquiries were about child poisoning from cosmetics (7%) and agricultural agents (4%).

**Figure 2: Substances Involved in Enquiries about Child Poisoning Made to the National Poisons Centre 2005.**<sup>4</sup>



## Peter's story

Peter was 22 months old when he climbed up on his ride-on toy to reach the brightly coloured bottle at the back of the kitchen bench. He removed the bottle cap that was claimed to be child-resistant and took a mouthful. Unfortunately the bottle contained caustic washing detergent and his mum was alerted by his screams as the poison burned. Sadly, Peter spent months in hospital, had over 26 surgical operations and can no longer swallow. Peter's life and the lives of his family have changed forever and he faces long-term difficulties.

## Preventing Poisoning

Childhood poisoning prevention focuses on **effective barriers between children and poisonous substances**. Safe storage of these substances is an important prevention measure. Child-resistant closures on bottles of medicine, cleaners and chemicals are also important, and should be used whenever possible — but **they are not** child-proof.

Adults need to ensure **all** medicines, household chemicals and cleaners are always kept in the original container, and are stored out of sight and reach of children — preferably in a high or locked cupboard/cabinet.

## References:

1. Injury Prevention Research Unit, unpublished NZHIS Hospitalisation Discharge Data (2000–2004).
2. National Injury Query System at [www.otago.ac.nz/ipru/stats](http://www.otago.ac.nz/ipru/stats)
3. Christchurch Hospital Emergency Department, unpublished data (April 2004–March 2005).
4. National Poisons Centre, unpublished Enquiries data (January 1 2005 to December 31 2005).